REMARKS

This Amendment is submitted in response to the Office Action dated November 3, 2004, having a shortened statutory period set to expire February 3, 2005.

Claim Objections Under 35 U.S.C. § 112

At paragraph 1 of the present Office Action, the Examiner has objected to Claims 4, 6, 12, 14, 20 and 22 as being indefinite for lack of antecedent basis. Applicants have corrected this deficiency by amendment to Claims 4, 6, 12, 14, 20 and 22, and Applicants thank the Examiner for his attention to detail.

Claim Rejections Under 35 U.S.C. § 101

At paragraph 3 of the present Office Action, the Examiner has objected to Claims 17-24 failing to recite statutory subject matter. Applicants have corrected this deficiency with respect by amendment of Claims 17, 18 and 24, and Applicants thank the Examiner for his attention to detail.

Claim Rejections Under 35 U.S.C. § 102

At paragraph 4 of the present Office Action, the Examiner has rejected Claims 1-2, 4, 6-10, 12 and 14-16 as being anticipated by U.S. Patent No. 6,683,993 to Mead (*Mead*). Anticipation is established only when a single prior art reference discloses, either expressly or under the principles of inherency, each and every element of a claimed invention as well as disclosing structure which is capable of performing the recited functional limitations. *RCA Corp v. Applied Digital Data Systems,* Inc., 730 F.2d 1440, 221 U.S.P.Q. 385 (Fed. Cir. 1984); *W.L. Gore and Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 U.S.P.Q. 303 (Fed. Cir. 1983). Applicants respectfully submit that *Mead* does not disclose all elements of Applicants' invention as recited in amended exemplary Claim 1, and Applicants respectfully traverse the Examiner's rejections, insofar as they might be applied to amended Claims 1, and Claims 2, 4, 6-10, 12 and 14-16. Applicants respectfully submit that amended Claim 1 and Claims 2, 4, 6-10, 12 and 14-16 are not anticipated by *Mead*.

When taken as a whole, *Mead* is directed to "transferring a data signal" with "a plurality of encoder libraries, one of the libraries containing a generic representation". (*Mead*, abstract), while Applicants' present invention is directed to a system and method for identifying image subregions and for replacing image subregions for transmission.

The differences in purpose between *Mead* and Applicants' present invention lead to specific elements, recited in Applicants' exemplary Claim 1, which *Mead* does not explicitly or inherently disclose. Foremost among these, Applicants' amended Claim 1 recites "generating a packaged image, which includes a decoding table comprising said first selected one of said one or more subregions and said corresponding identifier of said first selected one of said one or more subregions in place of said second selected one of said one or more subregions". The Examiner cites *Mead* at Col. 3, line 55- Col. 4, line 26 and Col. 4, lines 47-67 as disclosing the generating step. The cited text of *Mead* fails to disclose "generating a packaged image, which includes a decoding table comprising said first selected one of said one or more subregions and said corresponding identifier of said first selected one of said one or more subregions in place of said second selected one of said one or more subregions". Instead, the cited text section discloses transmitting extracting features and replacing them with codes, which are based on a stored and non-transmitted generic library, when it discloses:

> The video segment object encoder **44** further includes a feature extractor **48**, coupled to the image segmenter **46**. The feature extractor **26** describes the at least one object based upon at least one feature quantity computed therefrom. In general, the feature extractor **48** reduces the representation of an object to a smaller number of components having sufficient information for discrimination therebetween. Various procedures for feature extraction can be employed by the feature extractor **48**, as one with ordinary skill in the art of image processing will recognize.
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> Based upon the at least one feature quantity, each extracted object is compared by a classifier **50** to a set of generic objects, located in a generic library **52**, for object recognition. The generic library **52**, which is embodied by an electronic storage device, contains a corresponding representation for each of the generic objects. As an example, for an extracted object comprising a human head, the feature extractor **48** can extract features based upon shape and color for use by the classifier **50** in comparing to known human heads in the generic library **52**. Similarly, human facial models, backgrounds and image printing that

> are similar to clip art can be made available in the library **52**. The classifier **50** then produces the symbolic code corresponding to the closest recognized object in the generic library **52** based upon the at least one feature quantity. In the above-described example, the symbolic code for the closest recognized human head would be outputted by the object encoder **22**.
>
> In general, the object encoder **22** provides the symbolic code for each recognized object to a multiplexer **54**.
>
> An extracted object may not be recognized by any of the generic objects in the generic library **52**. In this case, the classifier **50** can add any unrecognized objects to the generic library **52** to be used as references for future similar objects. (*Mead* at Col. 3, line 55- Col. 4, line 26).

and:

> The multiplexer **54** multiplexes the symbolic code **58** provided by the view segment object encoder **44**, the unrecognized signal portion **60**, and the motion compensation signal **62** provided by the motion estimator **56**, to produce a serial bit stream representative thereof. As a result, the bit stream **64** contains information related to the generic objects represented in the video image, and motion of the objects. Further, the bit stream **64** contains coding for unrecognized objects. (*Mead* at Col. 4, lines 47- 67).

The Examiner notes at the bottom of page four that "a packaged image data of both unrecognized objects and symbolic codes of recognized objects are formed in multiplexor 54 and variable length coder of **Fig. 2.**" Applicant respectfully submits that, a packaged image, such as the examiner describes, does not teach "a packaged image, which includes a decoding table comprising said first selected one of said one or more subregions and said corresponding identifier of said first selected one of said one or more subregions in place of said second selected one of said one or more subregions."

Further, the selected text of *Mead* asserts that "Based upon the at least one feature quantity, each extracted object is compared by a classifier **50** to a set of generic objects, located in a generic library **52**, for object recognition." Referring to the figures, that generic library **22** is stored locally on the transmitting machine and is not transmitted to the receiving machine, which also contains a generic library **32**. Clearly, reliance on a locally stored library fails to disclose "generating a packaged image, which includes a decoding table comprising said first selected

one of said one or more subregions and said corresponding identifier of said first selected one of said one or more subregions in place of said second selected one of said one or more subregions." Applicants respectfully traverse the Examiner's rejection and submit that the teaching of "generating a packaged image, which includes a decoding table comprising said first selected one of said one or more subregions and said corresponding identifier of said first selected one of said one or more subregions in place of said second selected one of said one or more subregions" is facially absent from the *Mead* reference.

Similarly, Applicants respectfully traverse the Examiner's rejection of Claim 2. The Examiner asserts at page six that the step of "separating the packaged image into an image data structure and a decoding table containing one or more references and one or more corresponding identifiers". The Examiner cites column 5, lines 28-58 as providing the recited functionality. The cited text discloses:

> An embodiment of a video segment decoder **74** in accordance with the present invention is illustrated by the block diagram in **FIG. 3**. The decoder provides a system for reconstructing a video image from a bit stream **67** representative of an encoded video signal received from a corresponding encoder **44**. The bit stream **67** enters an inverse variable length coder **76**, or a like inverse entropy coder, which decompresses the bit stream. The decompressed bit stream is applied to a demultiplexer **78** which extracts a symbolic code, the code for unrecognized data and a motion compensation signal. In a preferred embodiment, the demultiplexer **78** includes a synchronizer which generates an internal clock signal in order to lock onto the bit stream.
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> The extracted symbolic code, code for the unrecognized signal, and motion compensation signal are applied to an object generator **80**. The object generator **80** includes a generic object decoder **82** and a generic object library **84** coupled thereto. The generic object library **84**, which contains the waveforms for a set of generic objects and corresponding symbolic identification codes, that correspond to the content of library **52**, is preferably embodied by an electronic storage device such as a EEPROM of the receiver **13**. The generic object decoder **80** acts to generate a signal representing a generic object in the generic object library **84** that was represented by the extracted symbolic code. The generic object library **84** is updated upon receiving, within the bit stream, new objects which were unrecognized in the segment encoder **44**. Hence, new objects added to the generic library **22** are also added to the generic object library **84** on a timely basis. (*Mead* at Col. 5, lines 28-58).

As above, Applicants respectfully traverse the Examiner's assertion and submit that the teaching of "separating the packaged image into an image data structure and a decoding table containing one or more references and one or more corresponding identifiers" is absent from the cited reference, because the reference teaches "representing a generic object in the generic object library **84** that was represented by the extracted symbolic code" based on a stored library, rather than a transmitted decoding table "containing one or more references and one or more corresponding identifiers". Applicants respectfully submit that the Examiner's rejection of Claim 1 under 35 U.S.C. § 102 is overcome.

The foregoing arguments made, with respect to exemplary amended Claims 1 and Claim 2, are also made with respect to dependent Claims 4-7 and independent Claim 8. Similarly, the foregoing arguments are made with respect to Claims 9-24, which recite a system and computer program product for performing Applicant's invention.

Claim Rejections Under 35 U.S.C. § 103

At paragraph 7 of the present Office Action, the Examiner has rejected Claims 3 and 11, 13, as unpatentable under 35 U.S.C. 103(a) over *Mead* in view of U.S. Patent No. 6,571,016 to Mehrotra *et al.* (*Mehrotra*).

As set forth in MPEP 2143, the first criterion for establishing a *prima facie* case of obviousness is that "there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to...combine reference teachings." In evaluating motivation or suggestion to combine reference teachings, "a prior art reference must be considered in its entirety, i.e., as a whole" (emphasis in original). MPEP 2141.02, citing *W.L. Gore and Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir 1983) *cert. denied*, 469 U.S. 851 (1984). In view of the teachings of the references as taken as a whole, there is no objective suggestion or motivation in the cited references (or generally in the art) that would lead a skilled artisan to combine the reference teachings to obtain the present invention. MPEP 2142, citing *Ex parte Skinner*, 2 USPQ2d 1788 (Bd. Pat. Appl & Inter. 1986). At page 8 of the present office action, the Examiner asserts that:

> It is desirable to optimize the combination of quality and compression efficiency in image compression. It would have been obvious to one of ordinary skill in the art, at

the time of the invention, to apply Mehrotra's teaching to decide the most effective size for each subregion to Mead's image for compression, because the combination improves combination of quality and compression efficiency.

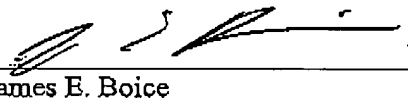
Because the Examiner's combination of references is not supported by any objective teaching in the references or art, Applicant believes that the examiner has failed to establish a *prima facie* case of obviousness. Specifically, the Examiner alleges that "It would have been obvious to one of ordinary skill in the art, at the time of the invention, to apply Mehrotra's teaching to decide the most effective size for each subregion to Mead's image for compression, because the combination improves combination of quality and compression efficiency." The Examiner provides no citation to where this alleged advantage of efficiency is taught in the references. Similarly, it is axiomatic that the use of the claimed invention as described in the presently pending application "as an instruction manual or 'template' to piece together the teaching of the prior art so that the claim invention is rendered obvious" is in contravention of *In re Fritch*, 23 USPQ2d 1780 (Fed.Cir. 1992).

Applicants respectfully traverse the Examiner's rejection of claims 3 and 11 for lack of any evidence of motivation to combine. The foregoing argument and traversal similarly apply the Examiner's rejection of Claims 5 and 13 over the unsupported combination of *Mead* and U.S. Patent No. 5,689,255 to Frazier *et al.* (*Frazier*) on the basis that "It would have been obvious to one of ordinary skill in the art, at the time of the invention, to apply Frazier's teaching to removing stored references that fail to appear recently to Mead's system, because the combination improves image compression with a finite size code table." Finally, Applicants respectfully traverse the Examiner's rejections of Claims 17-20 and 22-24, which are similarly bereft of evidence of the motivation to combine the references.

CONCLUSION

Applicants invite the Examiner to contact the undersigned attorney of record at (512) 343-6116 if such would further or expedite the prosecution of the present Application. No extension of time is believed to be required. However, in the event that an extension of time is required, please charge that extension fee and any other required fees to **IBM Corporation Deposit Account Number 50-0563.**

Respectfully submitted,



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